

**OCCUPATIONAL SAFETY  
AND HEALTH STANDARDS BOARD**

2520 Venture Oaks Way, Suite 350

Sacramento, CA 95833

(916) 274-5721

FAX (916) 274-5743

Website address [www.dir.ca.gov/oshsb](http://www.dir.ca.gov/oshsb)**SUMMARY****PUBLIC MEETING/PUBLIC HEARING/BUSINESS MEETING**

July 17, 2008

Costa Mesa, California

**I. PUBLIC MEETING****A. CALL TO ORDER AND INTRODUCTIONS**

Chair MacLeod called the Public Meeting of the Occupational Safety and Health Standards Board (Board) to order at 10:00 a.m., July 17, 2008, in the Costa Mesa City Council Chambers, 77 Fair Drive, Costa Mesa, California.

**ATTENDANCE****Board Members Present**

Chairman John MacLeod

Jonathan Frisch, Ph.D.

Bill Jackson

Jack Kastorff

**Board Members Absent**

José Moreno

Steve Rank

Willie Washington

**Board Staff**

Marley Hart, Executive Officer

David Beales, Legal Counsel

Mike Manieri, Principal Safety Engineer

Tom Mitchell, Senior Safety Engineer

Bernie Osburn, Staff Services Analyst

Chris Witte, Executive Secretary

**Division of Occupational Safety and Health**

Steve Smith, Principal Safety Engineer

Larry McCune, Principal Safety Engineer

**Others present**

Tina Kulinovich, Federal OSHA

Bo Bradley, AGC of California

Larry Pena, Southern California Edison

Kevin Bland, CFCA and RCA

Jogen Bhalla, AMOT USA

Eric Schellenberger, AMOT USA

Jim Phillips, IUOE Local 12

Gayle Mathe, California Dental Association

David Kennedy, DDS, IAOMT

Vince Lamaestra, Pacific Maritime Association

Kevin Maylone, IUOE Local 12

Dan Leacox, Greenberg Traurig

Bob Hornauer, NCCCO

Steve Johnson, ARCBAC

Elizabeth Treanor, Phylmar Regulatory  
Roundtable

Greg Peters, Specialty Crane

Teresa Pichay, California Dental Association

Graham Brent, NCCCO

Jeff Green, Dental Management

Craig Kappe, Metropolitan Stevedore  
Company

Anthony Kern, SSA Maritime  
Christopher San Giovanni, Metro Ports  
James Ryel, DOSH  
Suerrie Fenton, Southern California Edison  
Philip Youn, DOSH  
Charles Brown, Consumers for Dental Choice  
Mike Doering, DOSH  
Don Jarrell, Pacific Maritime Association

Bruce Wick, CalPASC  
Bob Dameron, California United Terminals  
Roy Swift, ANSI  
Cristy Sanada, Southern California Edison  
Kat Evans, EMS Terminal  
Mario Coccia, SSA Marine  
Nicole Leacox  
Ken Keane, PASHA Stevedoring and Terminals

B. OPENING COMMENTS

Chair MacLeod indicated that this portion of the Board's meeting is open to any person who is interested in addressing the Board on any matter concerning occupational safety and health or to propose new or revised standards or the repeal of standards as permitted by Labor Code Section 142.2.

Graham Brent, Executive Director of the National Commission for the Certification of Crane Operators (NCCCO), provided an update of crane certifications performed during the period 2004 through 2007. He stated that in order to be certified, operators must pass a written core exam as well as at least one written specialty exam. There are four mobile crane specialty exams—namely, for truck crane lattice boom, crawler crane, telescopic crane fixed cab, and telescopic crane swing cab; NCCCO also provides a tower crane exam. All candidates must pass a practical examination in addition to the two written exams. NCCCO does not provide training, although it does maintain a list of training providers on its website as a public service to candidates in the state of California and elsewhere.

During the period 2004 through 2007, NCCCO administered 1,576 written exams in California, representing a total of over 15,000 crane operators taking over 45,000 exams. The pass rate during this period was 68% across all exams. The two crane types most frequently selected by operators were the fixed cab and the swing cab telescopic cranes, in that order.

NCCCO practical exams, which are required for certification, are administered by practical examiners who are trained by NCCCO during a three-day workshop. Since 2004, NCCCO has conducted 16 practical examiner workshops in ten cities in California. There are currently 91 practical examiners in California authorized to administer practical exams, of which 50 are for-hire examiners, meaning that they are available to be hired by employers to administer NCCCO practical exams. During the period 2004 through 2007, NCCCO was responsible for the administration of over 20,000 practical exams administered to 14,500 crane operators. The average passing percentage was 78%.

The tower crane program is considerably smaller, which reflects the population of cranes in California, representing less than 5% of total candidates. During the period 2004 through 2007, 713 candidates took the tower crane written exam and 559 took the practical exam. There are approximately 400 certified operators in tower crane operation to date.

The result of the testing has been the issuance of certification cards to just under 9,000 California crane operators during the period 2004 through 2007. These crane operators are now fully certified by NCCCO. A number of additional crane operators completed the requirements for certification in the first five months of 2008. Thus, the total number of operators certified in California to operate mobile and tower cranes combined is over 10,000.

Dr. Roy Swift, Program Director of the Personnel Certification Accreditation Program for the American National Standards Institute (ANSI), summarized Petition File No. 504, of which he is the author. Dr. Swift stated that ANSI is petitioning to change Section 5006.1(c) to recognize ANSI as an accreditor of certification programs for mobile and tower crane operators. He stated that ANSI's Personnel Certification Accreditation Program is the gold standard in the industry, and ANSI's accreditation is extremely important to industries that employ certified persons to carry out tasks that affect public safety and security. It is the only Personnel Certification Accreditation Program that follows a globally recognized accreditation standard, ISO 17011, that includes not only a document review, but also an onsite visit to the certification body and performance testing locations.

Larry McCune, Principal Safety Engineer for the Division of Occupational Safety and Health (Division), provided an overview of the citations or violations involving injury and fatal accidents for the three-year period prior to crane operator certification becoming effective and the three years following adoption of the standard. For the three years prior to June 1, 2005 (the effective date of Section 5006.1), there were a total of ten fatal crane accidents as well as 30 serious injuries requiring hospitalization. After June 1, 2005, through May 31, 2008, there were two fatal crane accidents and 13 serious injuries requiring hospitalization. Since Section 5006.1 became effective, there has been a substantial reduction in the number of fatalities and serious injuries. Mr. McCune stated that these statistics are not entirely complete, as the report did not include accidents that involved no injuries or incomplete reporting.

Mr. McCune stated that during his review of these accidents, he noticed that the cases involving improper rigging far outnumbered cases involving the crane operation itself.

Mr. Jackson asked Mr. McCune whether the 15 crane operators involved in the 15 injury accidents between June 1, 2005, and May 31, 2008, were certified.

Mr. McCune responded that there were no citations issued in those cases for the lack of crane operator certification.

Mr. Jackson asked whether the causes of the accidents were operator error that would be attributable to an unqualified operator.

Mr. McCune stated that accidents involving contact with power lines seem to happen in a moment of distraction or through other failures to keep an eye on the location of power lines in relation to the crane's boom. He stated that the reduction in these types of accidents has been significant since crane operator certification had been mandated.

Mr. Jackson then asked whether the Division had any information regarding certifications from the Operating Engineers Program, the other certification entity in California.

Mr. McCune stated that the Division does not have those numbers, but that a representative from the International Union of Operating Engineers (IUOE) was present that would have that information.

Jim Phillips of the Operating Engineers Certification Program stated that although he did not have the exact numbers, IUOE had certified approximately 8,200 crane operators.

Dr. Frisch asked Mr. McCune what the citation rate had been for operators who were not properly certified.

Mr. McCune responded that he would present that information to the Board at a future date.

Dr. Frisch stated that he would be interested in knowing the citations that had been issued, and of those citations, whether there is any trend associated with operators who had tried and failed to pass the examinations that are still operating cranes.

Eric Schellenberger, President of Protective Technology for Roper Industries, summarized Petition File No. 505. The objective of the petition is to protect refineries and oil and gas facilities in which diesel engine powered equipment goes into a runaway condition—an engine running out of control on an external fuel source where the operator cannot shut down the engine by traditional methods. Turning off a diesel engine with an ignition does not shut down the engine, because it could be fueled by an external fuel source such as a vapor cloud or other external elements in the air. The most effective method of shutting down a diesel engine is an inexpensive air intake cut-off valve that can be installed easily on any type of diesel engine. Petition File No. 505 seeks to amend the Petroleum Safety Orders—Refining, Section 6874, by expanding the current regulation to address safety devices and safeguards to prevent fire and explosion for stationary, mobile, and vehicular diesel engines operating in and around refineries.

Mr. Kastorff asked what the cost to employers would be to retrofit existing equipment with the suggested air intake cut-off valve and what the cost would be to install the valve as standard equipment.

Mr. Schellenberger responded that the cost would be approximately \$150 to \$300 to install on a small engine; for a more sophisticated, stationary diesel engine, the cost would be \$1,500 to \$3,000. He stated that the average price is usually between \$750 to \$900.

Dr. Frisch asked why the proposal was being limited to the Petroleum Safety Orders and whether there are other hazardous environments in which the same risk exists.

Mr. Schellenberger responded that it would be wise to consider other industries such as mining and petrochemical facilities, and other workplaces in which diesel engines would be a potential ignition source.

Charles Brown, National Counsel for Consumers for Dental Choice and one of the authors of Petition File No. 501, spoke in support of the proposed petition decision and urged the Board to

ask the Health Expert Advisory Committee (HEAC) to “act expeditiously” in their consideration of changes to the PEL for mercury and send it back to the Board on a date certain.

Dr. David Kennedy of the International Academy of Oral Medicine and Toxicology, spoke in opposition of the proposed petition decision for Petition File No. 502. He stated that numerous routine daily activities in a dental office will exceed the ceiling limit for mercury. He stated that the Board staff’s evaluation was “full of errors” and not adequate to fulfill the petition.

Dr. Frisch asked Dr. Kennedy whether he was an employer during his 30 years as a practicing dentist. Dr. Kennedy responded affirmatively.

Dr. Frisch then asked whether Dr. Kennedy, as an employer, was aware of regulations applicable to the workplace he was managing. Dr. Kennedy responded that every two years, dentists are required to take continuing education courses. He has taken those courses, and at each one he has asked questions regarding informed consent, right to know, and facility monitoring, and each time, he received a false answer. He stated that he, personally, is aware of the regulations, but other dentists are not.

Dr. Frisch asked whether Dr. Kennedy’s implication was that most dentists who are managing other employees are not aware of and are not enforcing and are not complying with those regulations. Dr. Kennedy responded affirmatively.

Dr. Frisch stated that he was trying to determine whether the issue was one of lack of compliance with existing regulations or the need for new regulations. He asked what new regulations would help, if there is not already compliance with existing regulations.

Dr. Kennedy responded that currently there is no vertical standard for mercury protection. He stated that existing controls are inadequate to protect employees from mercury vapor. He also stated that most dentists do not know that they exceed the ceiling limits for mercury exposure.

Mr. Kastorff asked Mr. Smith how many mercury vapor detectors the Division has. Mr. Smith responded that although he did not have the exact number, he knows that the Division has them.

Mr. Kastorff asked whether Mr. Smith had the results of any testing the Division had performed. Mr. Smith responded that, in her evaluation of the petition, Deborah Gold reviewed citations that had been issued, and most of the citations were for asthma triggers and other pathogens in the dental industry. He was unsure whether there were citations for mercury exposure.

Mr. Kastorff stated that, as Dr. Frisch had mentioned, it appeared that this is a situation in which regulations exist and are not being enforced, rather than a need for a new regulation. He stated that he would like to see more data.

Dr. Kennedy stated that Ms. Gold’s evaluation also stated that most offices were in compliance with the time-weighted average PEL for mercury.

Chair MacLeod stated that Dr. Kennedy had indicated in his testimony that this has been a problem for in excess of 20 years, and now the petitions are asking that the Board act immediately. He expressed concern about that, and he asked Dr. Kennedy to clarify it.

Dr. Kennedy responded that he began to lecture to dentists on the Right to Know act in 1990 and has spoken in 27 countries, informing dentists about these hazards. He stated that the reason he is asking for immediate action by the Board is that there is now a large body of evidence showing that people in dentistry are being impaired, that the ceiling limit is being exceeded routinely, and it is an ongoing injury.

Chair MacLeod expressed his belief that the FDA has to issue regulations by June 2009. He asked whether Dr. Kennedy had any idea what those regulations would include or the direction they might go.

Dr. Kennedy responded affirmatively. He stated that mercury would most likely be classified as a Class 2 with controls. However, that would probably lead to lawsuits, because an implant that leaks mercury cannot be classified as a Class 2.

Jeff Greene, National Director for Citizens for Safe Drinking Water, was speaking on behalf of some of the other petitioners of Petition File No. 502. He stated that the existing regulations are not presented clearly enough to instigate voluntary compliance. Most dentists' offices, including dentists and dental assistants, have no idea that Section 5155 exists. In addition, it is not clear in establishing its application for the dental office, thus making compliance difficult. He stated that Section 5155 is not really appropriate for dental offices, as it relates to bloodborne pathogens and not mercury vapor.

He went on to state that it is common for the American Dental Association, the California Dental Association, and many other dental societies to discourage any dental office from using any measuring device to measure the amount of mercury vapor in the office. Thus, although there is a clear duty in Section 5155 to perform measurements, there is pressure to discourage the performance of such measurements and the use of protective measures.

Dr. Frisch stated that the testimony thus far had pointed to more of enforcement of existing regulations. He asked Mr. Greene whether dentists, as employers, are expected to know the laws of the state of California and to comply with those laws. Mr. Greene responded affirmatively. He stated, however, that the language of some of the regulations is unclear as to whether they apply to dental offices.

Dr. Frisch asked why creating new regulations would help clarify that the existing regulations apply to dental offices. Mr. Greene responded that it was not a matter of creating more rules but rather creating accurate rules for the situation in order that dentists would know that the regulations apply and would comply with them.

Dr. Frisch commented that, from Mr. Greene's statements, it would appear that the Board would have to create regulations for each specific workplace in the state. He further stated that he was unsure of what was truly different in this situation other than the employer dentists do not

understand that the regulation applies to them and are not complying with existing regulations. Mr. Greene responded that the existing regulations do not address mercury vapors.

Dr. Frisch asked whether there was a PEL for mercury vapors. Mr. Greene responded that there is a PEL, but there are no regulations regarding methods to remedy that, either as an engineering control or as protection. There are regulations that apply to bloodborne pathogens, but none that apply to mercury vapors.

Mr. Kastorff asked whether Mr. Greene had consulted with certified safety professionals or certified industrial hygienists, which have a role of protecting the environment, employees, and the general public. Mr. Greene responded negatively.

Mr. Kastorff stated that, in many cases, small employers would not be expected to have that resource available to them, and he asked whether dental associations would provide those resources. Mr. Greene responded that the American Dental Association and the California Dental Association deny that there is an issue that should be addressed for employees. The trade associations have been unwilling to discuss protection for the dental assistants on this issue.

Mr. Kastorff asked Mr. Greene whether an insurance association would provide such resources. Mr. Greene responded that the situation had been similar with insurance associations as well as hygienists' associations and other associations that dealt with training.

Chair MacLeod stated that Mr. Greene's testimony had emphasized that notice should be given to all dentists' offices regarding the issue of mercury vapors and protection from them, and he asked whether that was more of an informational or training matter than a regulatory matter. Mr. Greene responded that the intent of the regulations is compliance and effectiveness. However, if there is an entire industry that does not know that the regulations exist, he was unsure whether there was some other mechanism to disseminate the information.

Victoria Da Costa, dental hygienist, stated that with the exception of working with Dr. Kennedy, she had never been told that she had been unprotected as both a dental hygienist and a dental assistant. She stated that until the AIDS epidemic, there were no requirements to wear masks and gloves. Employees were informed simply to wash their hands before touching anything having to do with a patient. She was told, as a dental assistant, not to touch mercury with her fingers. She stated that dentists were not knowingly keeping dental assistants and dental hygienists unprotected, and there is no information regarding mercury vapors in any of the literature in any of the dental journals or anywhere else.

Teresa Pichay with the California Dental Association (CDA) stated that CDA had no opposition to the decision that Petition File Nos. 501 and 502 be sent to the HEAC for consideration of the PEL for mercury. She stated, however, that HEAC had already prioritized the chemicals for review, and asked how the Board's actions on the petitions would impact prioritization. CDA recommends denial of the petitions. She stated that the proposed decision appeared to have the intention of placating the petitioners. The Board's proposed action could be perceived as an endorsement of the petitioners' stance regarding dental amalgam. She stated that, contrary to earlier testimony, FDA had not changed its stance on amalgam, but rather had set a date to determine what action it would take on dental amalgam. The proposed regulation is whether or

not to classify amalgam as a Class 2 medical device. The FDA has not changed its position; it states that “dental amalgam contains mercury, which may have neurotoxic effects on the nervous system of developing children and fetuses.” Ms. Pichay stated that dental amalgam contains mercury—it is not mercury, and it is not equivalent to mercury.

Dr. Frisch stated that previous speakers had indicated that dental offices had been discouraged by the CDA and the ADA from having monitoring devices in their offices. Ms. Pichay responded that that was incorrect. The CDA’s website (CDA.org) has information regarding occupational safety and health and infection control. She stated that there is information on formaldehyde, nitrous oxide, and gluteraldehyde, which are the chemicals about which CDA receives the most questions. Her job at CDA involves taking calls from dental office staff on regulatory compliance issues.

Dr. Frisch asked whether, in Ms. Pichay’s experience, dentists are not aware of the OSHA regulations that apply to their workplaces. Ms. Pichay responded that the profession did a very good job of scaring the profession about OSHA concerning bloodborne pathogens. She stated that dentists are very well aware of applicable OSHA regulations. Ms. Pichay writes columns regarding compliance for the CDA newsletters. She stated that there is a vast amount of information on their website regarding compliance and with links to Cal-OSHA. She stated that CDA has scientific sessions twice a year, and at those sessions, there is an OSHA course every day.

Dr. Frisch asked whether hazcom information is included in the OSHA training. Ms. Pichay responded that it is included in some of the courses. The emphasis has been on bloodborne pathogens. She stated that CDA hires the lecturers, but they do not give them material, the lecturers develop their own course.

Dr. Frisch asked whether CDA gets involved in assisting and facilitating gathering of data that would be helpful in explaining what methods may be necessary to control exposures if they occur in the workplace. Ms. Pichay responded that the CDA had done that most recently with the gluteraldehyde issue. They participated in the advisory committee meetings, and they obtained data from two dental offices that had been identified as borderline. She stated that there were distinct differences between a specialty office that uses gluteraldehyde extensively and a general dental office.

Dr. Frisch asked whether CDA had monitored mercury in dental offices. Ms. Pichay responded that the monitoring of mercury had not been brought to CDA’s attention. She was unaware of workers’ compensation cases involving mercury exposure. CDA, as a professional association, has relationships with professional liability insurance companies and workers’ compensation insurance companies, and the issue of mercury exposure had not been raised.

Mr. Kastorff asked whether the CDA had done any sampling or monitoring of mercury in dental offices in the four months since the petitions had been submitted. Ms. Pichay responded that CDA would have to get permission from the members if they would be willing to have the CDA perform such sampling or monitoring.

Mr. Kastorff expressed his certainty that there would be at least one CDA member who would be willing. Ms. Pichay responded that that was likely, but that the use of amalgam had decreased significantly over the years. She stated that patient caseloads for a given day impact the measurements.

Elizabeth Treanor, Director of the Phylmar Regulatory Round Table, expressed appreciation for the staff's work on the static electricity proposal and for clarifying that high pressure water cleaning systems rather than water potentially could pose a static electricity risk to employees and that employers should take steps in establishing, maintaining, and implementing programs to protect employees from those risks.

C. ADJOURNMENT

With no further comments, Chair MacLeod adjourned the Public Meeting at 11:47 a.m.

## II. PUBLIC HEARING

A. PUBLIC HEARING ITEM

Chair MacLeod called the Public Hearing of the Board to order at 12:00 p.m., July 17, 2008, in the Costa Mesa City Council Chambers, 77 Fair Drive, Costa Mesa, California.

Chair MacLeod opened the Public Hearing and introduced the items noticed for public hearing.

1. TITLE 8:      **GENERAL INDUSTRY SAFETY ORDERS**  
Division 1, Chapter 4, Subchapter 7, Article 3  
Section 3248  
**Mechanical Refrigeration**

Mr. Manieri summarized the history and purpose of the proposal and indicated that the package is now ready for public comment and the Board's consideration.

Mr. McCune stated that after considering the proposal, the Division found that many of the refrigeration systems covered by the Process Safety Management Unit were built under the 1982 ANSI standard, which is now out of print. He asked that a portion of that standard be excerpted into the proposal, possibly as an appendix. The 1982 standard is significantly different from the current standard.

Mr. Jackson suggested that if referenced standards are out of print or otherwise unavailable, language from those standards should be incorporated into the proposal.

Mr. Kastorff asked Mr. McCune whether the Division was asking for changes to the proposal or a method of making an out-of-print standard available to the regulated public. Mr. McCune responded that the standard could be published as an appendix if it is no longer copyrighted, or pertinent language from the 1982 standard could be incorporated into the proposal.

Chair MacLeod asked Mr. Manieri whether ANSI standards are copyrighted and proprietary, meaning that language from them could not be written into OSHSB's proposals. Mr. Manieri responded that they are copyrighted, and that the 1982 standard's copyright may have expired, in which case it would be in the public domain. He stated that if that is the case, the standard could be appended to the proposal or language could be fashioned from that standard into something that is usable to the regulated public.

Dr. Frisch suggested that, if the standard is still copyrighted, staff could speak to the copyright owner and obtain permission to reprint the relevant language.

Dr. Frisch asked whether the proposed change would result in equipment that may not be compliant and have to be decommissioned. Mr. Manieri responded that one Division representative indicated that there may be mechanical refrigeration equipment dating back to 1908, and a standard from that era may be unavailable.

Dr. Frisch asked that staff include in the Final Statement of Reasons information as to whether or not the proposal improves health and safety, speaking directly to what the underlying changes are going to cause. Mr. Manieri agreed.

1. TITLE 8:        **GENERAL INDUSTRY SAFETY ORDERS**  
Division 1, Chapter 4, Subchapter 7, Article 98  
Section 4999  
**Properly Rigged (Handling Loads)**

Mr. Manieri summarized the history and purpose of the proposal and indicated that the package is now ready for public comment and the Board's consideration.

Kevin Bland, representing the California Framing Contractors Association and the Residential Contractors Association, spoke in support of the proposal, and asked for some nonsubstantive changes to the text.

The first change is in Section 4999(b), in which the responsibility to know the load is placed on the rigger. Mr. Bland agreed with that concept, but expressed concern that the language may exculpate the operator from the knowing the load if there is no load indicator or load weighing device. The rigger needs to know what is being lifted, what the weight is, and what type of rigging configuration is necessary; however, the crane operator also needs to know what he or she is lifting in order to determine the radius and where the load needs to be moved.

Mr. Bland's second concern is that subsection (h), which includes "other hoisting apparatus," is not to be extended to include something for which a crane is not being used that could be a lifting apparatus. Mr. Bland's concern was to clarify that the standard applies to the crane and what is hooked up to the crane for the rigging operations. In addition, subsection (h) states that a qualified person must verify that the load has been secured or supported before detaching a load from a crane. Mr. Bland was concerned that the language would indicate that only the rigger could detach the load. He expressed his belief that the intent of the standard is to ensure that before a load is detached from a hoisting device or from a crane, it is safe to detach. He wanted

to ensure that the language is clear that it does not have to be the rigger doing the physical detachment but indicating that the load is safe to be detached.

Vince Lamaestra, Assistant Coast Director of Accident Prevention for the Pacific Maritime Association (PMA), expressed concern that the proposal would require the maritime industry to have the same training and oversight on all crane loads without regard to the complexity, regularity, and frequency of the work. PMA believes that the proposal does not apply to the marine cargo handling industry, as that industry is regulated by vertical standards in Article 14. He stated that rigging requirements for many break bulk cargoes are contained in Article 14. The maritime industry's vertical standard is specific, containing requirements and in some instances, rigging instructions, for many types of cargoes. Bulk cargo in the maritime industry can consist of boxed, palletized, pre-slung, or back cargo. Those cargoes can be lumber, logs, rice (which comes in "superbags" of about one ton), steel coils, etc. The lifts are heavy, repetitive, and may involve innovative stevedoring equipment. These loads are of a known weight quantity, and rigging them is simple and straightforward; it is a process performed routinely by longshore workers that does not require additional rigger oversight. Project cargo consists of oversized, break bulk items such as wind turbines, yachts, and other cargo that will not fit on an open sided container or cannot be handled by forklifts or driven aboard. This cargo must be individually rigged with wires or slings for the lift. In general, the cargo owner provides specific rigging instructions on how to conduct the lift for safety and to ensure that the cargo will not be damaged. For these types of lifts, the PMA employs an experienced foreman to oversee the rigging and lift. Many times, the cargo owner or the representative are on the job, overseeing the lift. No construction, maintenance, or assembly is performed as part of any lift. PMA does not believe that Section 4999 should apply to the maritime industry. Longshore workers direct crane lifts and landings every day. They are experienced and rig and handle cargo safely under the current regulations.

Bo Bradley with the Associated General Contractors of California (AGC) spoke in support of the proposal, with some amendments. Under subsection (a), AGC recommends that the language state "the qualified person (rigger) shall be trained and capable of safely performing the rigging operation and all loads shall be rigged by or under the supervision of a qualified person (rigger)." Ms. Bradley also expressed agreement with Mr. Bland's comments regarding subsections (b) and (h). The AGC feels that subsection (d)(4) should be removed from the proposal, as it is redundant and already adequately addressed in subsection (g).

Ken Maylone of the International Union of Operating Engineers Local 12 spoke in support of the proposal. He stated that requiring the certification of riggers similar to that required for crane operators should go a long way toward enhancing the safety of the workplace by placing the responsibility for inspection and safe rigging practices in the hands of those whose work puts them in the best position to readily observe damage and deterioration of any of those rigging elements.

However, there is an ancillary issue that is of equal or greater importance that is not being addressed, and that is the qualification and education of crane signal persons. A good crane operator can move a load out to a 50 or 100 foot radius and place that load with a precision of a foot or two. If greater precision is needed, and it almost always is, the signal person is required to relay the proper instruction to the operator, either through standardized hand signals or voice

signals over radio or intercom systems. This is of the utmost importance when placing loads into areas where the operator cannot see the load or obstructions to the passage of that load. Here, the signal person becomes the eyes of the operator, and the success of that communication between them determines whether the lift will be performed safely or not.

Standardized hand signals are fairly simple, but it takes considerably more time to learn to use them efficiently. One must gain a solid understanding of a crane's geometry as well as which series of moves are the easiest for the operator to perform and which are the most difficult. Different crane types and different control mechanisms can mean that the same series of moves are easier to perform on one crane than on another. This type of knowledge is not easy to acquire and generally does not appear in any book or instruction manual. It is mostly learned by signalmen through ongoing associations with skilled operators; however, many contractors see this signal position as a non-productive position and want to place their least skilled or least experienced people in that position, when in reality they should be assigning their most experienced craftsmen to that work.

This issue has been a bone of contention with crane operators for many years, but it could be addressed by requiring all signalpersons to become certified under a program similar in design to that which crane operators must successfully complete.

B. ADJOURNMENT

Chair MacLeod adjourned the Public Hearing at 12:33 p.m.

**III. BUSINESS MEETING**

Chair MacLeod called the Business Meeting of the Board to order at 12:33 p.m., July 17, 2008, in the Costa Mesa City Council Chambers, 77 Fair Drive, Costa Mesa, California.

A. PROPOSED SAFETY ORDER FOR ADOPTION

1. TITLE 8:      **GENERAL INDUSTRY SAFETY ORDERS**  
Division 1, Chapter 4, Subchapter 7, Article 109  
Section 5168  
**PETROLEUM SAFETY ORDERS—REFINING,**  
**TRANSPORTATION, AND HANDLING**  
Division 1, Chapter 4, Subchapter 15, Article 5  
Section 6775  
**Static Electricity**  
(Heard at the April 17, 2008, Public Hearing)

Mr. Manieri summarized the history and purpose of the proposal, noting that it had been modified as a result of public comment, and he indicated that the package is now ready for adoption.

#### MOTION

A motion was made by Mr. Jackson and seconded by Dr. Frisch that the Board adopt the proposed safety order.

A roll call was taken, and all members present voted “aye.” The motion passed.

#### B.      PROPOSED PETITION DECISIONS FOR ADOPTION

1. Petition File No. 501  
Charles Brown, National Counsel, et. al.  
Consumers for Dental Choice
2. Petition File No. 502  
David Kennedy, DDS, et. al.  
International Academy of Oral Medicine and Toxicology

Ms. Hart summarized the history and purpose of the petitions and asked that the Board adopt the proposed petition decisions.

#### MOTION

A motion was made by Mr. Kastorff and seconded by Mr. Jackson to adopt the petition decision as proposed, which called for approval of the petition to the extent that the matter be sent to the HEAC for consideration.

Dr. Frisch asked whether there have been additional studies regarding mercury since the exposure limits were last revised in 2000. He asked whether there had been any relevant studies of significance that would warrant a change to reevaluate the PEL at this time. Mr. Smith responded that the only new thing is that the Office of Environmental Health Hazard Assessment (OEHHA) is to provide a risk assessment for reproductive toxicity, which is expected in approximately the next year.

Dr. Frisch asked whether it would be the HEAC's process that the information from that risk assessment would be considered in the course of their routine business, and should the risk assessment trigger the need to reevaluate the occupational exposure limits, the HEAC would then pursue it. Mr. Smith responded that it is anticipated, in that last December, the OEHHA issued a report of their recommendations and risk assessments for a number of chemicals, and based on that recommendation, the priority list for the HEAC was recently updated to address most of the substances on the OEHHA report.

Dr. Frisch asked if mercury was one of those substances, and Mr. Smith responded negatively. He reiterated that a risk assessment of mercury was expected from OEHHA in the next year.

Dr. Frisch asked whether mercury likely would be considered at a future date by the HEAC in the routine course of business, given the recent decision by the FDA and the anticipated OEHHA report that would contribute potentially new information. Mr. Smith responded affirmatively.

Dr. Frisch expressed his understanding of the HEAC process in that it works differently than regular advisory committees. As opposed to any other health and safety advisory committees that are made up of anyone who wishes to participate, the HEAC is a little more structured. Mr. Smith responded affirmatively, stating that the HEAC has a unique policy and procedure; the committee consists of recognized health experts from toxicology, occupational medicine, and industrial hygiene; these are set members of the committee. However, the committee welcomes anyone who wishes to participate. There is a lengthy list of interested parties; there are a number of people who attend, and none are prohibited from participating.

Dr. Frisch expressed concern about allegations that an employer group in the state of California is not aware of or not actively apprising members about existing regulations that may apply to them. Further, he expressed general concern that employers may not disclose to their employees the nature of chemicals to which those employees may be exposed and the hazards associated with those chemicals consistent with California regulations. Dr. Frisch expressed his concern that employers may choose to engage in practices that expose their employees to higher levels of those chemicals than are fit and/or that meet the standards of the state. He also is concerned about allegations of employers failing to be aware of or know what exposures their employees are facing in the workplace.

All of those issues are addressed by existing regulations, and he does not believe that adding more regulations to those already existing helps when the new regulations only restate the same rules. He stated that in this case, the concerns that have been raised are largely enforcement issues related to individual employers and possibly an entire class of employers who allegedly have not been following the rules as they are presently written. He does not believe that adding another regulation is going to help that. He also does not believe at this time that there is adequate evidence to justify taking mercury, which was one of the most recently reviewed of the chemicals in the HEAC PEL process, and moving it to the top of the list.

In looking at all of the exposures of all employees in the state of California in all industries, there are a number of other issues that also require precedence, and it is the Board's

responsibility to balance the needs of all industries when looking at which regulations need to be updated. Mercury was evaluated by the HEAC in 2000, and the science associated with mercury in 2000 was evaluated extensively in order to set the limit that presently exists. It is his belief at this time that there is no purpose to the employers or to the employees of the state to add to the burdens of HEAC by imposing on it another expectation related to their list. It is Dr. Frisch's expectation and a continuing concern that the HEAC and the Feasibility Committee need to be moving forward with the list they have right now, and he continues to be concerned that they are not moving forward with alacrity with the standards that they need to be setting. He stated that the Board has yet to see a PEL, and it is now July.

He expressed concern that the associations that deal with the dental industry need to be making certain that their employer members are aware of the standards with which they are expected to comply in California. It should not be an optional element, but a necessary part of doing business in California. If dentists are not aware of the expectations that are upon them for dealing with hazardous materials in the workplace, that would imply a breakdown of the training and education that is being offered.

Dr. Frisch expressed his intent to vote against the proposed petition decisions. He believes that the industry, the public, and the employee health are all best served at this time if the trade associations associated with the dental industry make certain that the existing regulations are understood by the dentists and the employers in their industry. It is incumbent on the Division and the Enforcement Unit of the Division to assure that those regulations are being complied with. If there are issues, they should be addressed not in terms of reestablishing more regulations but in making certain that the regulations that currently exist are being enforced.

Mr. Jackson expressed his agreement with Dr. Frisch's comments. He stated that this appears to be purely an enforcement problem, not a problem of insufficient regulations; regulations about monitoring, exposure levels, engineering controls, personal protective equipment, and hazard communication, if enforced, would seem to have made some of the alleged problems go away. The existing regulations should be enforced unless there is some evidence that those regulations, when complied with, do not protect employees. He stated that the petitioners and affected employees who believe that their employers are in violation of the regulations should call the Enforcement Unit and have Cal-OSHA determine whether or not there is compliance. In all of the other industries in California, a complaint moves to the top of the list. He suggested that if a number of dentists had an enforcement that involved their having to do something, they would flock to their trade association to ask that the association establish a procedure to help the dentists comply with existing regulations.

Mr. Kastorff stated that there had been a lot of information provided and many allegations made, but there had been no numbers provided. He would like to see all of the parties involved perform serious research by peer reviewed, certified individuals to provide real data. He does not think that a point has been reached where the Board can move forward until it has more data.

Chair MacLeod asked whether a time weighted average and a PEL for mercury includes mercury vapors. Mr. Mitchell responded that it is for both mercury and mercury vapors. He stated that the PEL also would apply to the liquid phase of mercury.

A roll call was taken, and all members present, with the exception of Mr. Kastorff, voted "no." The motion failed.

Dr. Frisch then moved that the petitions be denied, and Mr. Jackson seconded. A roll call was taken, and all members present, with the exception of Mr. Kastorff, voted "aye." The motion passed.

#### C. PROPOSED VARIANCE DECISIONS FOR ADOPTION

Mr. Beales summarized the 52 proposed variance decisions for adoption, asking that Variance File No. 08-V-122 be removed from the consent calendar for further hearing. He also asked that Variance File No. 07-V-046 be removed from the consent calendar for separate discussion. He asked that the Board approve the remaining items on the consent calendar and thereby adopt the proposed decisions as written.

#### MOTION

A motion was made by Mr. Jackson and seconded by Mr. Kastorff to adopt the consent calendar as proposed by Mr. Beales.

A roll call was taken, and all members present voted "aye." The motion passed.

A motion was made by Mr. Jackson and seconded by Mr. Kastorff to adopt the proposed decision for Variance File No. 07-V-046.

Dr. Frisch expressed discomfort with the safety of Aramid fiber ropes used in the Thyssen-Krupp ISIS series of elevators and the number of conditions required to grant the variance. He asked for clarification regarding these issues.

Mr. Beales stated that the central issue of this variance application was whether or not the Aramid fiber ropes provide equivalent safety to steel wire ropes as the standard requires. Without any additional measures taken, the answer is "no." Therefore, the conditions of the variance must provide enough safety features to give the system equivalent safety, and those conditions will ensure that the elevator is inspected with enough rigor so that any problem will be detected before it actually causes a safety hazard, and should that fail, there are fail safe systems in place that will stop the elevator before the safeties, which are the final fail safe system, have to engage. The rationale of the proposed decision is that equivalent safety is provided by the three levels of precautions established by the conditions.

Dr. Frisch asked why, if that was the case, was condition 31 necessary (that condition requires the ultimate replacement of all Aramid ropes with non-Aramid ropes). Mr. Beales responded that it was added with the consensus of all parties because the applicant made it clear that for reasons apart from safety, the applicant intended to stop using Aramid ropes. Mr. Beales stated that the applicant was adamant that that replacement would take place by March 31, 2009.

Dr. Frisch asked what the applicant's reasons for replacing the Aramid ropes were, if they were

not for the safety issue. Mr. Beales responded that one was a marketing issue and because of the bad press that the Aramid fiber has received. The second and more overriding reason is that Thyssen-Krupp has thousands of elevators that it services, and only a small fraction are the Aramid fiber rope elevators, which creates operational difficulties for Thyssen-Krupp having a specialized service operation for a small number of elevators.

Dr. Frisch asked whether the ISIS elevators were approved for use in the state of Washington. Mr. Beales responded affirmatively.

Dr. Frisch asked if new ISIS elevators were being installed in Washington. Mr. Beales responded that he did not know.

Dr. Frisch asked whether there were other states that were not permitting these elevators to be installed. Mr. Beales responded that one of the findings of fact in the proposed decision addresses that question. He stated that Board staff had received information that New York City does not allow ISIS elevators in its jurisdiction as a result of concerns about vandalism and fire safety with the KCore (which is a synonym for Aramid) ropes. Wisconsin briefly shut down all ISIS elevators in that state as a result of the Seattle incident. However, the state of the Board staff's information was that Wisconsin has allowed those elevators to return to operation. In addition, there was a moratorium in North Carolina that has been lifted.

Dr. Frisch asked about the consequences if the variance is not granted. Mr. Beales responded that that would be up to the Division's permitting and enforcement operations.

Chair MacLeod asked how many ISIS elevators were installed in the state of California. Mr. Beales responded that he did not know at the moment. He stated that there are two categories of ISIS elevators, ISIS I and ISIS II. This is the first ISIS II application that the Board has received, and it involves two elevators. Mr. Beales indicated that Dan Leacox with Greenberg Traurig, who represents Thyssen-Krupp, was at the meeting and would be better able to answer the question.

Chair MacLeod invited Mr. Leacox to respond to the question. Mr. Leacox stated that there are approximately 75 ISIS elevators in 40 locations, both ISIS I and ISIS II. He stated that it was not a 50-50 distribution of ISIS I and ISIS II. Mr. Beales expressed his belief that there are more ISIS I elevators than ISIS II based on the number of variance applications.

Chair MacLeod stated that the 75 ISIS elevators have been operating under an experimental variance, and he asked how long that experimental variance had been in effect. Mr. Beales responded that the ISIS I experimental variance had been in effect for four years and the ISIS II for three years.

Mr. Kastorff asked what happens to the rest of the ISIS elevators if the variance is approved or disapproved. Mr. Beales responded that the Division has guidelines governing how long experimental variances can continue, and in the case of the ISIS elevators, the Division has allowed the experimental variance to carry on past the normal deadline of two years. He stated that one possibility is that the Division will allow the elevators to continue operating under the experimental variance if the permanent variance is not granted, but that is a matter between the

Division and the applicant.

Mr. Beales stated that one of the rationales for the proposed variance decision is that there has been a track record with the operation of the two elevators that are the subject of this particular variance application, and there have been no reported safety hazards or operational problems during the time that they have been in operation, and that safety record combined with the conditions imposed, that is another basis for concluding that equivalent safety is presented.

Chair MacLeod observed that having 75 elevators in an experimental program is a bit much, and perhaps more could be learned by having only one or two and determining whether or not they operate as required.

Mr. Jackson stated for the record that given the evidence that was presented to the hearing panel on these two elevators in place in Sacramento and the evaluation of the staff report, sworn testimony of Board staff, the Division, and the applicant, he is convinced that this proposed decision with these conditions provides equivalent safety.

A roll call was taken, and all members present voted “aye.” The motion passed.

#### D. OTHER

##### 1. Legislative Update

Mr. Beales stated that last month he had reported that AB 515, which would require the Board to undertake rulemaking about hazardous substances that are potentially carcinogenic, had been the subject of committee action in the Senate Environmental Quality Committee. However, when he checked the legislative website for updates, that particular action had been excised as if it had never happened. He contacted the Legislative Office at the Department of Industrial Relations for clarification and was told that there was a misunderstanding or disagreement regarding the handling of this bill involving the applicable Senate rule. The bill did pass the committee, but the bill’s status is ambiguous because the manner in which the bill is being handled procedurally in the Senate is ambiguous. Thus, that bill may or may not be moving forward. According the DIR, however, the author’s office has indicated that the bill is not dead, and they will find some way to keep the contents alive and moving forward.

##### 2. Variance Process Update

Mr. Beales stated that over approximately the last 18 months, Board staff and a Board committee consisting of Dr. Frisch and Mr. Jackson have been working to find ways to streamline the variance process. There has been no overall plan for variance reform, but rather all of the people involved have been looking for practical, everyday ways of completing the work in a more efficient fashion.

The technical staff has participated in this endeavor by having Richard Parenti serve as a specialist in the repetitive elevator variances, as it is more efficient to have one person work on these variances. Mr. Parenti has streamlined his report, and he has submitted

one report that covers multiple cases when the technical information in the report is relevant to multiple cases. He also is working toward a system in which the substance of these repetitive reports will not have to be repeated in report after report, but rather, it will be in one central place, and the paper record will indicate under which repetitive classification a particular application falls and what standard recommendation follows from that classification. Many redundancies in the paperwork have been eliminated, as well. Board staff member Rebecca Estrella's excellent work in this regard was recognized. In addition, the variance application has been simplified for ease of use.

Most significantly, an expedited hearing process has been adopted in which as many as today's approximately 50 standard elevator variances can be heard in the space of about five minutes or less, because everything is so predictable that the key tool for handling these variances is the pre-hearing process, through which all the paperwork is given to all the parties prior to the hearing, and if they have any problem with anything, they are provided the opportunity to raise those concerns prior to the hearing so that by the time the hearing itself is held, all concerns have been allayed.

The goal of these changes is to streamline the process without having to change the governing regulations or statutes. If either of those actions were necessary, change would take much longer than it has.

Chair MacLeod commended and expressed appreciation for Mr. Beales and other Board staff, as well as Dr. Frisch and Mr. Jackson, for their work on this process. He stated that all involved had done a remarkable job in streamlining the elevator variance process and lightening the workload.

Mr. Jackson and Mr. Kastorff thanked Mr. Beales for his work on the project as well.

### 3. Executive Officer's Report

Ms. Hart thanked Mr. Beales, Board staff, and the Board members for their work on the variance process. It is something that had been discussed for many years and it has come to fruition. A procedure has been established that is working, and although it will not lessen the number of variance applications, it will expedite the process.

She then summarized the Calendar of Activities.

Ms. Hart presented a mid-year review to demonstrate the staff's progress in meeting goals set in January with the rulemaking calendar. She stated that when the rulemaking calendar is developed each year, it is developed with realistic goals in mind, but staff typically overreaches when listing the projects. One of the primary reasons for that is to let the public know what may be scheduled in the upcoming year. If there is a possibility that a rulemaking or an advisory committee is going to be set, it is included. In addition, staff does not know how many variances and petitions will be submitted during the year, so staff tries to strike a balance between the rulemaking and the variances and the petitions, keeping in mind that if a lot of petitions and/or variances are submitted,

particularly those that require a lot time, it reduces the amount of time available to spend on rulemaking activities.

The development of a rulemaking proposal has many layers and includes work products from the engineers, the analysts, and the legal staff. The staff at the Board has worked tirelessly to conduct several advisory committees this year, and to develop the required rulemaking documents. Board staff is a cohesive group that works well together and supports each other throughout the process.

The mid-year review reflects a great accomplishment in meeting the stated goals, and plans are established for the second half of the year.

In addition to the rulemakings listed on the rulemaking calendar in January, there are additional rulemakings that have been added to the list. One is High Visibility Apparel, which will be noticed for Public Hearing in October. This was a rulemaking initiated by staff based on information that came from a petitioner. The petition was withdrawn, but there was merit to the petitioner's request, and Board staff opted to proceed with the rulemaking.

Three rulemaking packages were submitted by the Division—Aerosol Transmissible Disease, Zoonotics, and Diacetyl. All three of those projects are very lengthy and time-consuming. Staff has completed the in-house review in working with the Division on Aerosol Transmissible Disease and Zoonotics, and those have been noticed for Public Hearing in August. Diacetyl is still under internal review, and staff anticipates that it will be noticed for Public Hearing at the end of this year or possibly at the beginning of 2009.

In addition to the rulemaking activity, staff has docketed six petitions this year, of which one was granted, two were on today's Business Meeting Agenda, one was withdrawn, and two were presented during the Public Meeting today. As of June 30, staff had docketed 160 variances, of which 114 were routine elevator variances. Of the remaining variances, Ms Hart highlighted in her written report some of the variance applications that had required thorough, in-depth review by the Board staff.

Ms. Hart stated that staff will begin developing the rulemaking calendar for 2009, and she asked that the Board members notify her if they had any input for it. She went on to express appreciation for the staff and their efforts over the year. Staff is dedicated to the Board's mission, their work is commendable, and they have performed in an exemplary fashion.

Dr. Frisch expressed his thanks to the staff. He stated that it is testimony to the staff's dedication that in the midst of upheaval in the California government this year, they have been able to continue to perform the work they have done this year.

Dr. Frisch also thanked the staff for moving forward on the Petrini petition, regarding rollover protection for riding lawn mowers.

Ms. Hart stated that due to the ongoing budget crisis, reimbursement for travel expenses will not be made until the budget is signed by the governor. Once the budget is signed and travel expenses are reimbursed, however, the mileage rate has been increased to 58.5¢ per mile as of July 1.

4. Future Agenda Items

Dr. Frisch asked for the Division to provide an update on the status of the PEL process, including an anticipated timeline for bringing a set of PELs before the Board.

Ms. Hart stated that the Division has committed to presenting an update on heat illness at the August meeting.

Chair MacLeod asked for the Division to provide a briefing on the experimental variance program in terms in how it is administered, the procedures used for granting experimental variances, and any applicable regulations.

Dr. Frisch added that if there are distinctions in which the Division handles experimental variances for elevators as opposed to other experimental variances, those distinctions should be included in the briefing.

Dr. Frisch asked Ms. Hart and Chair MacLeod to invite all of the staff members for a public acknowledgement of the Board's appreciation for staff's work at the December Board meeting in Sacramento.

F. ADJOURNMENT

Chair MacLeod adjourned the Business Meeting at 1:42 p.m.